

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

PUBLICATION NUMBER : 11219436  
PUBLICATION DATE : 10-08-99

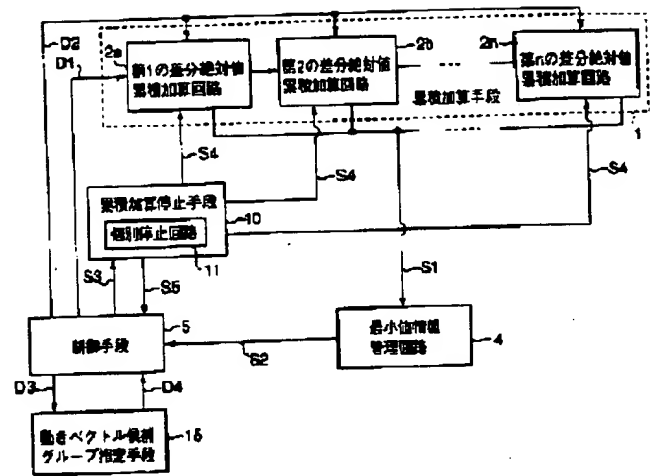
APPLICATION DATE : 30-01-98  
APPLICATION NUMBER : 10019987

APPLICANT : TOSHIBA CORP;

INVENTOR : NISHIKAWA TSUYOSHI;

INT.CL. : G06T 7/20 H04N 7/32

TITLE : MOVING VECTOR DETECTION  
CIRCUIT AND METHOD THEREFOR



ABSTRACT : PROBLEM TO BE SOLVED: To shorten the cumulative addition time of absolute difference values of respective pixels on a moving vector candidate in a macro block and a reference image.

SOLUTION: The moving vector detection circuit is provided with a moving vector candidate group specification means 15 consisting of a grouping means for sorting candidates in a search range set up for moving vector candidates into plural groups and an order determination means for determining the order of cumulative addition preferentially from a group having high probability of including a real moving vector, a cumulative addition means 1 for inputting original image information D1 and reference image information D2 in parallel and cumulatively adding the absolute difference values between both the information D1, D2 in accordance with the order determined by the specification means 15, a minimum value information managing circuit 4 for comparing an output from the means 1 with minimum value information and managing the information, a cumulative addition stopping means 10 including an individual stop circuit 11 for stopping the operation of each cumulative addition circuit after detecting the minimum value information by the circuit 4, and a control means 5 for controlling these means 1, 10.

COPYRIGHT: (C)1999,JPO

Best Available Copy